

California Regional Water Quality Control Board
Santa Ana Region

Draft Order No. R8-2019-0052
Amendment of Order No. R8-2015-0023
Waste Discharge Requirements and Master Reclamation Permit
For
El Toro Water District
Water Recycling Plant and Recycled Water Use
Orange County

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter, Santa Ana Regional Water Board or Santa Ana RWB), finds that:

1. On June 19, 2015, the Santa Ana Regional Water Board adopted Order No. R8-2015-0023, prescribing waste discharge requirements and master reclamation permit for the El Toro Water District's (hereinafter Discharger or ETWD's) water recycling plant and recycled water use within the Irvine Groundwater Management Zone.
2. The Discharger owns and operates a Water Recycling Plant (WRP) and a recycled water distribution system that includes lined reservoirs, pump stations, and pipelines, among other features, that distributes recycled water within the boundaries of the Santa Ana Regional Water Board and the San Diego Regional Water Quality Control Board (San Diego Regional Water Board). However, ETWD's water recycling plant, reservoirs and most of the recycled water use areas are located within the boundaries of the Santa Ana Regional Water Board and a small fraction of recycled water use areas are located within the San Diego Regional Water Board.
3. The San Diego Regional Water Board regulated, until May 8, 2019, the use of recycled water, produced at the Discharger's WRPs, within the Aliso Hydrologic Sub-area under Order 97-52, *Waste Discharge and Water Recycling Requirements for the Production and Purveyance of Recycled Water by Member Agencies of the South Orange County Reclamation Authority*, which is a regional water recycling permit.
4. In a letter entitled, "Request for Santa Ana Regional Water Quality Control Board to Regulate Waste Discharge Requirements from El Toro Water District Water Recycling Plant," dated November 29, 2016, the Discharger requested to this Regional Water Board and the San Diego Regional Water Board the designation of the Santa Ana Regional Water Board as the sole Regional Water Board for the regulation of the treatment, distribution and use of recycled water produced at the Discharger's WRP. The Discharger made the regional water board designation request pursuant to Section 13228(a) of the California Water Code, which states the following:
 - (a) Concerning any matter that may be submitted to a regional board by a person or entity that is subject to regulation by more than one Regional Board, the person or entity may submit the matter to one of those regional boards if both of the following requirements are met:

- (1) The person or entity submits a written request to all affected regional boards that one Regional Board be designated to regulate the matter.
 - (2) All affected Regional Boards agree in writing to the designation. Unless the Board of any affected Regional Board denies the request, the Executive Officer of a Regional Board may grant a request submitted pursuant to paragraph (1) on behalf of that Board.
5. Also, the Discharger's November 29, 2016 letter included supporting information such as Exhibits "A" and "B". Exhibit "A" consists of a map that shows the location of ETWD's water recycling plant and distribution pipelines within the boundaries of the San Diego and Santa Ana Regional Water Boards. Exhibit "B" contains a comparison between the annual averages of recycled water monitoring data for an eleven-year period (2005-2015) for ETWD's water recycling plant and the 12-month average effluent limits for recycled water discharges specified under San Diego Regional Water Board's Order 97-52. The recycled water monitoring data indicates that ETWD has complied with all effluent limits for the eleven-year period prior to the date of ETWD's November 29, 2016 request letter. In addition, the Santa Ana RWB's staff have verified that ETWD has maintained full compliance with both orders issued by the Santa Ana and San Diego RWBs during the monitoring periods of 2016, 2017, and 2018.
6. The San Diego and the Santa Ana Regional Water Boards agreed with ETWD's request to designate the Santa Ana Regional Water Board as the sole Regional Water Board for regulating the ETWD's Water Recycling Plant. In a letter dated May 5, 2017, which was addressed to ETWD, the San Diego Regional Water Board memorialized this agreement and included pertinent background and supporting information and conditions for the designation responsibility of the Santa Ana Regional Water Board, which becomes Attachment "I" of Order No R8-2015-0023. The Santa Ana Regional Water Board ratified this agreement in a letter issued to ETWD dated August 8, 2019, which becomes Attachment "J" of Order No. R8-2015-0023. This designation became effective on May 8, 2019 when the San Diego Regional Water Board adopted Addendum No. 5 of Order No. 97-52 to exclude ETWD from coverage under Order No. 97-52.
7. It is appropriate to amend Order No. R8-2015-0023 to modify the reclamation specifications that apply to Discharge Point 001 (DP 001) and incorporate discharge specifications that are included in San Diego Regional Water Board's Order 97-52 for discharges of recycled water into use areas located within the jurisdictional boundaries of the San Diego Regional Water Board and regulate them under Order No. R8-2015-0023. This amendment adds Attachments "I" and "J" to Order No. R8-2015-0023.
8. In accordance with Water Code Section 13389, amending the waste discharge requirements for this discharge is exempt from those provisions of the California Environmental Quality Act (CEQA) contained in Chapter 3 (commencing with Section 21100), Division 13 of the Public Resources Code.

9. The Board has notified the discharger and other interested agencies and persons of its intent to amend waste discharge requirements for the discharge and has provided them with an opportunity to submit their written views and recommendations.
10. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Order No. R8-2015-0023 be amended as follows:

1. Order No. R8-2015-0023, page 1, replace Table 2., as follows:

Table 2. Discharge Locations and Recycled Water Use Areas

Discharge Point	Effluent Description	Discharge Point (Latitude)	Discharge Point (Longitude)	Receiving Water
DP-001 Recycled water	Up to 4 mgd of tertiary treated and disinfected	33°37'08"N	117°43'37"W	Irvine Groundwater Management Zone & Aliso Hydrologic Sub-area (Per San Diego Regional Water Board's Basin Plan)

2. Order No. R8-2015-0023, List of Attachments, page 4, replace the List of Attachments, as follows:

Attachment A – Definitions-----A-1
Attachment B – Location Map-----B-1
Attachment C – Flow Schematic -----C-1
Attachment D – Not Used
Attachment E – Monitoring and Reporting Program (MRP)-----E-1
Attachment F – Fact Sheet -----F-1
Attachment G – EPA PPL Table -----G-1
Attachment H – ML Table -----H-1
Attachment I – San Diego Regional Water Board's Designation Agreement Letter--I-1
Attachment J – Santa Ana Regional Water Board's Designation Agreement Letter-J-1

3. Order No. R8-2015-0023, Findings, page 6, add a third paragraph at the end of Section II.A., as follows:

The San Diego Regional Water Quality Control Board (San Diego Regional Water Board) regulated, until May 8, 2019, the Discharger's production and distribution of recycled water and use areas, within its region's Aliso Hydrologic Sub-area, under Order No. 97-52, "*Waste Discharge and Water Recycling Requirements for the Production and Purveyance of Recycled Water by Member Agencies of the South Orange County Reclamation Authority*," which is a regional water recycling permit.

In a letter dated November 29, 2016, the Discharger requested to this Regional Water Board and the San Diego Regional Water Board the designation of this Regional Water Board as the sole Regional Water Board for the regulation of the treatment, distribution and use areas of recycled water produced at the Discharger's water recycling plant. Including the distribution of recycled water to use areas located within the boundaries of the San Diego Regional Water Board. The Discharger made the regional water board designation request pursuant to Section 13228(a) of the California Water Code. The San Diego and this Regional Water Boards agreed with ETWD's request to designate this Regional Water Board as the sole Regional Water Board for regulating the ETWD's Water Recycling Plant. The San Diego and this Regional Water Boards memorialized the designation agreement in separate letters addressed to the Discharger, which were dated May 5, 2017 and August 8, 2019 respectively. On May 8, 2019 the San Diego Regional Water Board adopted Addendum No. 5 to Order No. 97-52 to exclude ETWD from coverage under Order No. 97-52, thus, making the designation agreement effective. Copies of these designation agreement letters are included in this Order as Attachment I and J.

4. Order No. R8-2015-0023, Findings, page 6, replace Section II.B., as follows:

B. Facility Description. The Discharger owns and operates the Water Recycling Plant and its wastewater treatment processes include: preliminary treatment that consist of influent flow metering, mechanical bar-screening, aerated grit chamber, and fine screening (roto-strainers); influent flow equalization; odor control with inorganic media filter beds; secondary treatment that consists of an activated sludge process with limited nutrient removal (nitrification/denitrification) and one secondary effluent holding pond; tertiary treatment system that uses rotating-disk cloth filters and disinfection with chlorine (chlorine contact basin). The secondary effluent holding pond covers approximately 2.5 acres and is used to store, temporarily, secondary effluent under emergency conditions when the Facility is not able to dispose of the secondary effluent through the ocean outfall. Normally, the secondary effluent stored in the holding pond is gravity fed to the wet-well of the ocean outfall pump station. The Facility is designed to treat up to 6.0 mgd of wastewater to secondary treatment standards and up to 4.0 mgd of tertiary-2.2 recycled water. Also, the Discharger has constructed a recycled water distribution system composed of a storage tank, pump station, and approximately 19 miles of pipeline. The recycled water use areas are located within the boundaries of this Regional Water Board and the San Diego Regional Water Board, in the Cities of Laguna Woods and Laguna Hills. Attachment B is a location and vicinity map for this facility. Attachment C is a flow schematic of the treatment systems.

5. Order No. R8-2015-0023, Findings, page 6, replace Section II.C., as follows:

C. Legal Authorities. This Order serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4, Division 7 of the California Water Code (commencing with section 13260) and as a master reclamation permit

pursuant to Section 13523.1 of Article 4, Chapter 7, Division 7 of the California Water Code. In addition, this Order includes reclamation specification for the use of recycled water produced at ETWD's Facility at use areas located within the jurisdictional boundaries of the San Diego Regional Water Board, in the Cities of Laguna Woods and Laguna Hills, in accordance with a Regional Water Board designation request made by ETWD pursuant to Section 13228(a) of the California Water Code. The San Diego and this Regional Water Boards agreed with ETWD's request to designate this Regional Water Board as the sole Regional Water Board for regulating the ETWD's Water Recycling Plant. This designation became effective on May 8, 2019 when the San Diego Regional Water Board adopted Addendum No. 5 of Order No. 97-52 to exclude ETWD from coverage under Order No. 97-52.

6. Order No. R8-2015-0023, Findings, page 7, replace Section II.G., as follows:

G. California Environmental Quality Act (CEQA). The requirements in this Order are based on information submitted as part of the application and other available information. Attachment F, which contains background information and rationale for requirements in this Order, is hereby incorporated into this Order, and thus constitutes a part of the Findings for this Order. Attachments A, B, C, E, G, H, I, and J are also incorporated into this Order.

7. Order No. R8-2015-0023, Reclamation Specifications, page 8, replace Table 5 and Section IV.A.2., as follows:

Table 5 Recycled Water Limitations at REC-001

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	12-month running average
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	20	30	--
Total Suspended Solids	mg/L	20	30	--
Chloride	mg/L			375
Sulfate	mg/L			375
% Sodium	%			60
Nitrate	mg/L			45
Iron	mg/L			0.3
Manganese	mg/L			0.05
MBAS	mg/L			0.5
Boron	mg/L			0.75
Aluminum	mg/L			1.0
Arsenic	mg/L			0.05
Antimony	mg/L			0.006

Table 5 Recycled Water Limitations at REC-001

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	12-month running average
Barium	mg/L			1.0
Beryllium	mg/L			0.004
Cadmium	mg/L			0.005
Cyanide	mg/L			0.2
Mercury	mg/L			0.002
Nickel	mg/L			0.1
Selenium	mg/L			0.05
Thallium	mg/L			0.002

Note: The 12-month running average effluent limitations on this table apply to recycled water use that overlies the Aliso Hydrologic Sub-area only.

- 2. TDS Limitations:** For recycled water use on sites overlying the Aliso Hydrologic Sub-area, the 12-month running average TDS concentrations shall not exceed 1,000 mg/L. For recycled water use on sites overlying the Irvine Groundwater Management Zone, the 12-month flow weighted running average TDS concentration shall not exceed 910 mg/L unless:
8. Order No. R8-2015-0023, Reclamation Specifications, page 12, add Section IV.A.13. and Section IV.A.14., as follows:
13. Uses of recycled water with frequent or routine application (for example: agricultural or landscape irrigation uses) shall be at agronomic rates and shall consider soil, climate, and plant demand. In addition, application of recycled water and use of fertilizers shall be at a rate that takes into consideration nutrient levels in recycled water and nutrient demand by plants. This Regional Water Board may require the Discharger to submit an Implementation or Operations and Management Plan specifying agronomic rates and nutrient application for the use area(s) and a set of reasonably practicable measures to ensure compliance with this Order. The Discharger must implement the following to ensure that recycled water and fertilizer are applied in use sites at agronomic rates:
- Monitor nutrient concentrations in recycled water supplies and notify recycled water site supervisors of the nutrient concentrations of recycled water.
 - Conduct periodic inspections of end use sites to verify the agronomic application rates of recycled water considering fertilizer application and the nutrient level of the recycled water applied to the landscape or provide monthly water budgets to each use site based on agronomic

rates, provide monthly reporting to each use site of actual use compared with the agronomic water budget for each use site, and target sites with recycled water consistently above the agronomic rate for follow-up.

14. In lieu of meeting the recycled water effluent limit for Nitrate of 45 mg/L (Section IV.A.1., Table 5), the Discharger may elect to conduct a nitrogen study to verify that the use of recycled water from ETWD's Facilities for landscape or agricultural irrigation does not cause the water quality of the underlying groundwater to exceed the groundwater quality objective for nitrate of 45 mg/L (as nitrate) nor exacerbate an existing condition that exceeds the nitrate groundwater quality objective. The nitrogen study must evaluate factors such as existing nitrogen removal achieved at the plant, need for additional treatment processes to remove nitrogen, fate and transport of nitrogen in the groundwater, groundwater monitoring, application of recycled water and fertilizer at agronomic rates, nitrogen uptake by turf grass or other vegetation, and other best management practices. A workplan for the nitrogen study, if needed, must be received at our Santa Ana Regional Water Board's office by November 30, 2019, and must identify proposed tasks and milestones for completing the nitrogen study, and a schedule for completing the study activities. A nitrogen study report documenting the results of the study must be received at this Regional Water Board by August 30, 2020. For a valid reason, the Executive Officer may grant additional time to submit the workplan and/or report for the nitrogen study.
9. Attachment E, Reclamation Monitoring Requirements, page E-5, replace Table 3, as follows:

Table 3. Recycled Water Monitoring at REC-001

Parameter	Units	Sample Type	Minimum Sampling & Testing Frequency
Flow	mgd	Recorder/ Totalizer	Continuous
pH	Standard units	Recorder	Continuous
CT ¹	mg/L-min	Calculation	Continuous
Turbidity ²	NTU	Recorder	Continuous
Coliform Organisms	MPN per 100 mL	Grab	Daily
BOD ₅	mg/L	composite	Weekly

Table 3. Recycled Water Monitoring at REC-001

Parameter	Units	Sample Type	Minimum Sampling & Testing Frequency
Total Suspended Solids	mg/L	composite	Weekly
TDS	mg/L	composite	Quarterly
TIN	mg/L	Composite	Quarterly
Chloride	mg/L	Composite	Quarterly
Percent Sodium	%	Composite	Quarterly
Sulfate	mg/L	Composite	Quarterly
Iron	mg/L	Composite	Quarterly
Manganese	mg/L	Composite	Quarterly
MBAS	mg/L	Composite	Quarterly
Boron	mg/L	Composite	Quarterly
Aluminum	mg/L	Composite	Annually
Arsenic	mg/L	Composite	Annually
Antimony	mg/L	Composite	Annually
Barium	mg/L	Composite	Annually
Beryllium	mg/L	Composite	Annually
Cadmium	mg/L	Composite	Annually
Cyanide	mg/L	Composite	Annually
Mercury	mg/L	Composite	Annually
Nickel	mg/L	Composite	Annually
Selenium	mg/L	Composite	Annually
Thallium	mg/L	Composite	Annually
Nitrate	mg/L	Composite	Quarterly

10. Attachment E, Reclamation Monitoring Requirements, page E-6, add Section IV.A.2., as follows:

2. The Discharger shall increase the sampling frequency from weekly to daily, from quarterly to monthly, and from annually to quarterly for any constituent that exceeds the recycled water effluent limitations specified in Table 3 of this Order. To return to the monitoring frequency specified, the Discharger shall

request and receive approval from the Regional Water Board's Executive Officer or designee after maintaining compliance with the effluent limitations in question for at least three consecutive monitoring periods.

11. Attachment E, Reclamation Monitoring Requirements, page E-6, replace Section IV.B., as follows:

B. Monitoring Recycled Water Users

The Discharger shall record the information described below and shall submit annually a summary report of the recorded information by groundwater management zone to the Regional Water Board.

1. Use site information summary that includes the following: a) Name and address of use site; b) Owner of the site; c) Name and phone number of the onsite supervisor; d) Groundwater management zones underlying the use sites; e) Annual volume of recycled water delivered; f) Total area (in acres) of each landscape irrigation site; g) The amount of nitrogen (in pounds per acre per year) applied in recycled water on each landscape irrigation site (required if the Discharger elects to implement a nitrogen study per Section IV.A.14. of the Order); and h) Type of use (e.g. irrigation, industrial, etc.).
2. Recycled water use site inspection summary that includes the number of inspections conducted by the Discharger and number of violations, if any.
3. Summary of compliance status and enforcement actions taken by the Discharger for recycled water users known to be in violation of its rules and regulations, which include a description of violations (cause, duration, and impact), measures taken to correct and eliminate recurrence of a violation or threatened violation, and compliance schedules issued to use sites.

12. Attachment F, Discharger/Facility Information, page F-3, replace Table 1, as follows:

Table 1. Discharger/Facility Information	
WDID	8 303598001
Discharger/Operator	El Toro Water District
Name of Facility	Water Recycling Plant
Facility Address	23542 Moulton Parkway, Laguna Woods, CA 92654
Facility Contact, Title and Phone	Mark Pade, Chief Plant Operator, (949) 837-7050, Ext 103, mpade@etwd.com
Authorized Person to Sign and Submit Reports	Dennis Cafferty, General Manager, (949) 837-7050, Ext 223, dcafferty@etwd.com
Mailing/Billing Address	24251 Los Alisos Boulevard, Lake Forest, CA 92630
Type of Facility	POTW
Threat to Water Quality	2
Complexity	B
Pretreatment Program	N

Table 1. Discharger/Facility Information	
Reclamation Requirements	Producer/User
Facility Design Flow – secondary treatment	6 million-gallons-per-day (mgd) secondary treated
Facility Design Flow – tertiary treatment	4.0 mgd tertiary treated and disinfected
Facility Permitted Flow	6.0 mgd
Receiving Water	Irvine Groundwater Management Zone Aliso Hydrologic Sub-area (Per San Diego Regional Water Board's Basin Plan)
Receiving Water Type	Groundwater
Watershed	San Diego Creek/Upper Newport Bay Watershed

13. Attachment F, Discharger/Facility Information, page F-4, replace Section I.A., as follows:

- A.** El Toro Water District (hereinafter Discharger or ETWD) owns and operates a sanitary sewer collection system, a Water Recycling Plant (hereinafter the Facility), and a recycled water distribution system. The Discharger currently discharges tertiary treated disinfected wastewater from the Facility pursuant to waste discharge and producer/user water reclamation requirements, Order No. 94-3. The Santa Ana Regional Water Board issued Order No. 94-3 to the South Orange County Reclamation Authority (SOCRA, predecessor to South Orange County Wastewater Authority or SOCWA). ETWD is a member of SOCWA. SOCWA was created to facilitate and manage the collection, transmission, treatment and disposal of wastewater from South Orange County areas. Other member agencies of SOCWA include: Irvine Ranch Water District, City of Laguna Beach, Moulton Niguel Water District, City of San Clemente, South Coast Water District, City of San Juan Capistrano, Santa Margarita Water District, Trabuco Canyon Water District and Emerald Bay Service District. Most facilities under SOCWA are within the San Diego Regional Water Quality Control Board's (hereinafter San Diego Regional Water Board's) jurisdiction.

ETWD facilities are mostly within the Santa Ana Regional Water Board's jurisdiction, however, ETWD has expanded its recycled water distribution system within the jurisdiction of the San Diego Regional Water Board. As indicated in Table 1, the Facility has secondary treatment capacity for 6 mgd and tertiary treatment capacity for 4 mgd. Secondary treated un-disinfected wastewater is discharged to the Pacific Ocean via the Aliso Creek ocean outfall and it is regulated under San Diego Regional Water Board Order No. R9-2012-0013, NPDES Permit No. CA0107611, issued to SOCWA. This Order regulates the discharge of tertiary treated disinfected recycled water to use areas located within the jurisdiction of this Regional Water Board and the San Diego Regional Water Board, however, as explained in Section I.D below, this Regional Water Board has been designated to be the sole Regional Water

Board that regulates the treatment and distribution of recycled water produced at the ETWD's Facility.

14. Attachment F, Discharger/Facility Information, page F-5, add a second paragraph at the end of Section I.D., as follows:

The San Diego Regional Water Board regulated, until May 8, 2019, the Discharger's production and distribution of recycled water and use areas, within its region's Aliso Hydrologic Sub-area, under Order No. 97-52, "*Waste Discharge and Water Recycling Requirements for the Production and Purveyance of Recycled Water by Member Agencies of the South Orange County Reclamation Authority*," which is a regional water recycling permit. In a letter dated November 29, 2016, the Discharger requested to this Regional Water Board and the San Diego Regional Water Board the designation of this Regional Water Board as the sole Regional Water Board for the regulation of the treatment, distribution and use areas of recycled water produced at the Discharger's water recycling plant. Including the distribution of recycled water to use areas located within the boundaries of the San Diego Regional Water Board. The Discharger made the regional water board designation request pursuant to Section 13228(a) of the California Water Code. The San Diego and this Regional Water Boards agreed with ETWD's request to designate this Regional Water Board as the sole Regional Water Board for regulating the ETWD's Water Recycling Plant. The San Diego and this Regional Water Boards memorialized the designation agreement in separate letters addressed to the Discharger, which were dated May 5, 2017 and August 8, 2019 respectively. On May 8, 2019 the San Diego Regional Water Board adopted Addendum No. 5 to Order No. 97-52 to exclude ETWD from coverage under Order No. 97-52, thus, making the designation agreement effective. Copies of these designation agreement letters are included in this Order as Attachment I and J. Regional Water Board staff requested and received additional information from the Discharger until July 10, 2019.

15. Attachment F, Facility Description, Discharge Points and Receiving Waters, page F-7, replace Section II.B.1. and Table 3., as follows:

Table 3. Discharge Points

Discharge Serial No.	Effluent Description	Location (Latitude & Longitude)	Receiving Water	Flow & Frequency
DP-001 Recycled Water	Disinfected Tertiary	33°37'08"N 117°43'37"W	Irvine Groundwater Management Zone Aliso Hydrologic Sub-area (Per San Diego Regional Water Board's Basin Plan	Up to 4.0 mgd, intermittent

1. Discharge Point for Recycled Water Use – DP-001

The Discharger has started the distribution of tertiary-2.2 recycled water and plans to distribute up to 3.7 mgd of recycled water via DP-001 to the ETWD's recycled water system. The final design capacity of the tertiary treatment and disinfection system is 4.0 mgd. The recycled water use areas overlie the Irvine Groundwater Management Zone (Per the Santa Ana Regional Water Board's Basin Plan) and the Aliso Hydrologic Sub-area (Per San Diego Regional Water Board's Basin Plan).

16. Attachment F, Applicable Plans, Policies, and Regulations, page F-7, replace Section III.A., as follows:

A. Legal Authorities.

This Order serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4, Division 7 of the California Water Code (commencing with section 13260) and as a master reclamation permit pursuant to Section 13523.1 of Article 4, Chapter 7, Division 7 of the California Water Code. In addition, this Order includes reclamation specification for the use of recycled water produced at ETWD's Facility at use areas located within the jurisdictional boundaries of the San Diego Regional Water Board, in the Cities of Laguna Woods and Laguna Hills, in accordance with a Regional Water Board designation request made by ETWD pursuant to Section 13228(a) of the California Water Code. The San Diego and this Regional Water Boards agreed with ETWD's request to designate this Regional Water Board as the sole Regional Water Board for regulating the ETWD's Water Recycling Plant. This designation became effective on May 8, 2019 when the San Diego Regional Water Board adopted Addendum No. 5 of Order No. 97-52 to exclude ETWD from coverage under Order No. 97-52.

17. Attachment F, Applicable Plans, Policies, and Regulations, page F-8 and F-9, replace Section III.C.1. and Table 4, as follows:

1. Water Quality Control Plans

The Regional Water Board adopted a Water Quality Control Plan for the Santa Ana River Basin (hereinafter Basin Plan) that became effective on January 24, 1995. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan.

On January 22, 2004, the Regional Water Board adopted Resolution No. R8-2004-0001, amending the Basin Plan to incorporate revised boundaries for groundwater sub-basins, now termed "management zones", new nitrate-nitrogen and TDS objectives for the new management zones, and new nitrogen and TDS management strategies applicable to both surface and ground waters. The State Water Board and Office of Administrative Law (OAL) approved the N/TDS Amendment on September 30, 2004 and December 23, 2004, respectively. Accordingly, these waste discharge requirements implement relevant,

groundwater-related components of the N/TDS Amendment. Specifically, the total dissolved solids (TDS) limitation established in this Order is based on the amended Basin Plan.

The San Diego Regional Water Board adopted the Water Quality Control Plan for their region on September 8, 1994 and subsequently approved by the State Water Resources Control Board (SWRCB) on December 13, 1994. Subsequent revisions to the San Diego Regional Water Board's Basin Plan have also been adopted by their board and approved by the SWRCB. The San Diego Regional Water Board's Basin Plan contains beneficial uses and water quality objectives. The reclamation specifications for recycled water use, within the Aliso Hydrologic Sub-area, of this Order are consistent with the San Diego Regional Water Board's Basin Plan.

As previously discussed, the Facility is producing tertiary treated recycled water that is being used in areas overlying the Irvine Groundwater Management Zone and the Aliso Hydrologic Sub-area. The designated beneficial uses of receiving waters affected by the discharge from the Facility are as follows:

Table 4. Basin Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Uses
001	Irvine GMZ	Present or Potential: a. Municipal and domestic supply, b. Agricultural supply, c. Industrial service supply, and d. Industrial process supply
001	Aliso Hydrologic Sub-area (Per San Diego Regional Water Board's Basin Plan)	Present or Potential: a. Municipal and domestic supply, and b. Agricultural supply.

Requirements of this Order implement the Basin Plans of this Regional Water Board and the San Diego Regional Water Board.

18. Attachment F, Rationale for Effluent Limitations and Discharge Specifications, Reclamation Specifications, page F-11, replace Section IV.F.3., Section IV.F.4., and Table 6, as follows:

3. The TDS limitation of 910 mg/L for recycled water reuse on sites overlying the Irvine Groundwater Management Zone is based on the TDS water quality objective in Table 5-3 of the Basin Plan (BP). Also, the TDS limitation of 1,000 mg/L for recycled water reuse on sites overlying the Aliso Hydrologic Sub-area is based on the TDS water quality objective included in the Basin Plan (BP-SD) of the San Diego Regional Water Board. The effluent limits for biochemical oxygen demand and total suspended solids are based on best professional judgment (BPJ), Section IV.D. of Attachment F of this Order, and pH is based on water quality objectives included in the Basin Plans of this Regional Water Board and the San Diego Regional Water Board. The effluent limitations for CT, turbidity, and total coliform are based on the recycling criteria contained in Title 22 (Title 22). All other recycled water effluent limits included in Table 6 below are based on the water quality objectives that apply to the Aliso Hydrologic Sub-area; which are included in the Basin Plan of the San Diego Regional Water Board.

4. Summary of Recycled Water Limitations:

Table 6. Summary of Recycled Water Limitations at DP-001

Parameter	Units	Effluent Limitations						Basis
		Average Monthly or as noted herein	Average Weekly	Daily average or as noted herein	Instantaneous Minimum or as noted herein	Instantaneous Maximum	12-month running average	
BOD ₅	mg/L	20	30	--	--	--		BPJ
Total Suspended Solids	mg/L	20	30	--	--	--		BPJ
pH	Standard Units				6	9		BP
CT	milligram-minutes per liter	--	--	--	450	--		Title 22
Total Coliform	MPN/100mL	23 ¹	2.2 median in 7 days	240 ²	--	--		Title 22

¹ Not more than once in any 30-day period

² Maximum Daily

Table 6. Summary of Recycled Water Limitations at DP-001

Parameter	Units	Effluent Limitations						Basis
		Average Monthly or as noted herein	Average Weekly	Daily average or as noted herein	Instantaneous Minimum or as noted herein	Instantaneous Maximum	12-month running average	
Turbidity	NTU	--	--	2	5 ³	10		Title 22
Chloride	mg/L						375	BP-SD
Sulfate	mg/L						375	BP-SD
% Sodium	%						60	BP-SD
Nitrate	mg/L						45	BP-SD
Iron	mg/L						0.3	BP-SD
Manganese	mg/L						0.05	BP-SD
MBAS	mg/L						0.5	BP-SD
Boron	mg/L						0.75	BP-SD
Aluminum	mg/L						1.0	BP-SD
Arsenic	mg/L						0.05	BP-SD
Antimony	mg/L						0.006	BP-SD
Barium	mg/L						1.0	BP-SD
Beryllium	mg/L						0.004	BP-SD
Cadmium	mg/L						0.005	BP-SD

³ Not to exceed more than 72 minutes in any 24-hour period

Table 6. Summary of Recycled Water Limitations at DP-001

Parameter	Units	Effluent Limitations						Basis
		Average Monthly or as noted herein	Average Weekly	Daily average or as noted herein	Instantaneous Minimum or as noted herein	Instantaneous Maximum	12-month running average	
Cyanide	mg/L						0.2	BP-SD
Mercury	mg/L						0.002	BP-SD
Nickel	mg/L						0.1	BP-SD
Selenium	mg/L						0.05	BP-SD
Thallium	mg/L						0.002	BP-SD

19. Attachment F, Rationale for Receiving Water Limitations, page F-12, replace Section V.B.1., as follows:

1. The receiving groundwater limitations in the proposed Order are based on the water quality objectives contained in the Basin Plans of this Regional Water Board and the San Diego Regional Water Board.

20. Attachments, add Attachment I - San Diego Regional Board's Designation Agreement Letter, pages I-1 through I-3, which is attached to this Order.

21. Attachments, add Attachment J - Santa Ana Regional Board's Designation Agreement Letter, pages J-1 through J-3, which is attached to this Order.

22. These amendments shall become effective upon the adoption of this Order.

23. All other conditions and requirements of Order No. R8-2015-0023, including Attachments, shall remain unchanged.

I, Hope A. Smythe, Executive Officer, do hereby certify that the forgoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on September 13, 2019.

Hope A. Smythe
Executive Officer